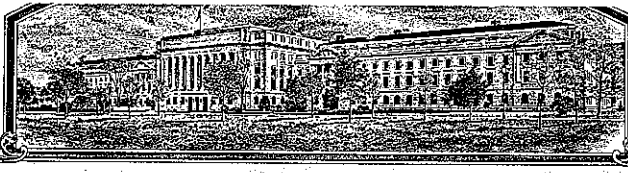


No.

200300337



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*Monsanto Company*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

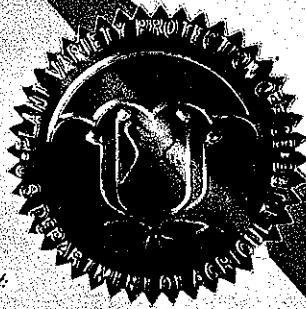
NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR PLANT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED, (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'NuHills'

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this nineteenth day of March, the year two thousand and four.*

Attest:



*Blm Zuber*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Am...*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the privacy Act of 1974 (5 U.S.C. 552a)

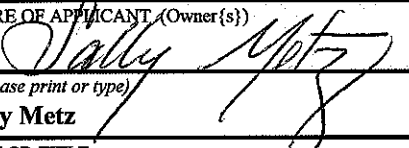

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421) Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) <b>Monsanto Company</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER <b>W98-363W</b>	3. VARIETY NAME <b>NuHills</b>
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) <b>800 North Lindbergh Mail Zone E3NA Creve Coeur, Missouri 63167</b>		5. TELEPHONE (include area code) <b>636-737-6089</b>	FOR OFFICIAL USE ONLY PVPO NUMBER <b>200300337</b>
		6. FAX (include area code) <b>636-737-7250</b>	
7. GENUS AND SPECIES NAME <b>Triticum aestivum</b>	8. FAMILY NAME (Botanical) <b>Gramineae</b>		FILING AND EXAMINATION FEE: <b>3652.00</b>
9. CROP KIND NAME (common name) <b>Hard White Winter Wheat</b>			DATE <b>9/22/2003</b>
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (common name) <b>Corporation</b>			CERTIFICATION FEE <b>432.00</b>
11. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>Delaware</b>		12. DATE OF INCORPORATION <b>1933</b>	DATE <b>2/23/2003</b>
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS <b>Ms. Sally Metz 800 North Lindbergh Mail Zone E3NA Creve Coeur, Missouri 63167</b> AND <b>Mr. Rob Bruns PO Box 30 Berthoud, CO 80513</b>			14. TELEPHONE (include area code) <b>970-532-3721</b>
			15. FAX (include area code) <b>970-532-2035</b>
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds, or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input checked="" type="checkbox"/> YES (if "yes", answer items 18 and 19 below) <input type="checkbox"/> NO (if "no", go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDERS SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> YES (if "YES", give names of countries and dates) <input checked="" type="checkbox"/> NO			

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s)) 		SIGNATURE OF APPLICANT (Owner(s)) 	
NAME (Please print or type) <b>Sally Metz</b>		NAME (Please print or type) <b>Rob Bruns</b>	
CAPACITY OR TITLE <b>Director Wheat Technology</b>	DATE <b>9/17/03</b>	CAPACITY OR TITLE <b>General Manager</b>	DATE <b>9/15/03</b>

***Exhibit A.***  
***Origin and Breeding History of NuHills***

The cross involving Abilene/Jagger was made in 1994 in the greenhouse at Berthoud, CO. and designated 94x1054. F<sub>1</sub> plants were grown in the greenhouse and F<sub>2</sub> seed planted at Nardin, OK in 1996. The F<sub>2</sub> plot was harvested in bulk because of short plant height and better disease resistance, cleaned with a gravity table and the F<sub>3</sub> seed spaced planted at Berthoud during the fall of 1997. During the spring of 1998 individual space plants were selected based upon plant height, stem strength, head size and yield potential. The F<sub>4</sub> row was designated 97PRY1 151-72 and planted in observation trials throughout Kansas, Oklahoma and Nebraska. Based upon improved disease resistance, short plant height and good test weight patterns the line was selected for yield trials and designated W98-363W. In 1999 W98-363W was tested in advanced yield trials at 3 locations. In 2000 the line was tested in elite trials at 5 locations and in 2001 W98-363W was tested 6 locations in the southern Great Plains. In 1999 48 head rows were evaluated for uniformity and plant type, 3 rows were identified as white seed and green plant type and grown individually as initial breeders seed in plots in 2001. Two of the three plots were bulked to form the breeders seed of W98-363W (NuHills). Two acres of Breeders seed was grown in 2002. A small foundation increase was made in Idaho in 2003.

NuHills has been uniform and stable since 2001. Less than 0.8% of the plants were rogued from the Breeders seed increase in 2002. Approximately 82% of the rogued variant plants were taller height wheat plants (5 to 15 cm), 3% were blue-green at boot stage, 3 % were red chaffed, and 2% were awnletted wheat plants. Up to 1% variant plants may be encountered in subsequent generations.

A red seeded variant of 0.5% has also been identified in the Breeders seed production plots. Up to 0.8% red seeds may be encountered in subsequent generations.

***Exhibit B.***  
***Statement of Distinctness***

NuHills is most similar to the hard red winter wheat 'Jagalene'. However, it can be easily distinguished by the following morphological characteristics:

- NuHills has a medium glume length, (Berthoud, CO 2002 and 2003). Jagalene has a long glume length, (Berthoud, CO 2002 and 2003).
- NuHills has a tapering head shape, (Berthoud, CO 2002 and 2003). Jagalene has a strap head shape, (Berthoud, CO 2002 and 2003).
- NuHills has a square shoulder shape, (Berthoud, CO 2002 and 2003). Jagalene has an oblique shoulder shape, (Berthoud, CO 2002 and 2003).
- NuHills has white seed coat, (Berthoud, CO 2002 and 2003). Jagalene has red seed coat, (Berthoud, CO 2002 and 2003).

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY  
WHEAT (*Triticum* Spp.)

NAME OF APPLICANT(S) <b>Monsanto Company</b>	FOR OFFICIAL USE ONLY PVPO NUMBER <b>200300337</b>
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) <b>800 North Lindbergh Mail Zone E3NA Creve Coeur, Missouri 63167</b>	NAME OR EXPERIMENTAL DESIGNATION <b>NuHills</b>

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in the first box when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized standard may be used to determine plant colors; designate system used.

Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

**1** 1=Common 2=Durum 3=Club 4=Other (specify) \_\_\_\_\_

2. VERNALIZATION:

**2** 1=Spring 2=Winter 3=Other (specify) \_\_\_\_\_

3. COLEOPTILE ANTHOCYANIN:

**1** 1=Absent 2=Present

4. JUVENILE PLANT GROWTH:

**2** 1=Prostrate 2=Semi-erect 3=Erect

5. PLANT COLOR (boot stage):

**3** 1 = Yellow-Green 2 = Green 3 = Blue-Green

6. FLAG LEAF (boot stage):

**1** 1 = Erect 2 = Recurved

**2** 1 = Not Twisted 2 = Twisted

7. EAR EMERGENCE:

**0 0** Number of Days Earlier Than \_\_\_\_\_ \*

**0 3** Number of Days Later Than **Jagger** \*

8. ANTHR COLOR:

**1** 1 = YELLOW 2 = PURPLE

9. PLANT HEIGHT (from soil to top of head, excluding awns):

**0 0** cm Taller Than \_\_\_\_\_ \*

**0 5** cm Shorter Than **Jagger** \*

\* Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

## 10. STEM:

## A. ANTHOCYANIN

**2** 1= Absent 2=Present

## B. WAXY BLOOM

**2** 1=Absent 2=Present

C. HAIRINESS (*last internode of rachis*)

**2** 1=Absent 2=Present

D. INTERNODE (*specify number*)

**1** 1=Hollow 2=Semi-solid 3=Solid

## E. PEDUNCLE

**1** 1=Erect 2=Recurved

**2 0** cm Length

11. HEAD (*at Maturity*):

## A. DENSITY

**2** 1=Lax 2=Middense 3= Dense

## B. SHAPE

**1** 1 = Tapering 2= Strap 3 = Clavate 4 = Other (*specify*)

## C. CURVATURE

**2** 1 = Erect 2 = Inclined 3 = Recurved

## D. AWNEDNESS

**4** 1 = Awnless 2 = Apically Awnletted 3 = Awnletted 4 = Awned

12. GLUMES (*at Maturity*):

## A. COLOR

**1** 1 = White 2 = Tan 3 = Other (*specify*)

## B. SHOULDER

**4** 1 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate

## C. BEAK

**3** 1 = Obtuse 2 = Acute 3 =Acuminate (short)

## D. LENGTH

**2** 1 = Short (ca. 7mm) 2 = Medium (ca. 8mm) 3 = Long (ca. 9mm)

## E. WIDTH

**2** 1 = Narrow (ca. 3mm) 2 = Medium (ca. 3.5mm) 3 = Wide (ca. 4mm)

## 13. SEED:

## A. SHAPE

**1** 1 = Ovate 2 = Oval 3 = Elliptical

## B. CHEEK

**1** 1=Rounded 2=Angular

## C. BRUSH

**2** 1=Short 2=Medium 3=Long

**1** 1 = Not Collared 2 = Collared

## D. CREASE

**1** 1 = Width 60% or less of Kernel  
2 = Width 80% or less of Kernel  
3 = Width Nearly as Wide as Kernel

**1** 1 = Depth 20% or less of Kernel  
2 = Depth 35% or less of Kernel  
3 = Depth 50% or less of Kernel

## 13. SEED: (continued)

## E. COLOR

☒ 1 = White    2 = Amber    3 = Red    4 = Other (*specify*) \_\_\_\_\_

## F. TEXTURE

☒ 1 = Hard    2 = Soft

G. PHENOL REACTION (*see instructions*):

☒ 0 = Ivory    2 = Fawn    3 = Light Brown    4 = Dark Brown    5 = Black

14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant) 5=moderately resistant  
PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED 6=moderately susceptible

<input checked="" type="checkbox"/> 2 Stem Rust ( <i>Puccinia graminis</i> f. sp. <i>tritici</i> ) Field races	<input checked="" type="checkbox"/> 2 Leaf Rust ( <i>Puccinia recondita</i> f. sp. <i>tritici</i> ) Field races
<input checked="" type="checkbox"/> 2 Stripe Rust ( <i>Puccinia striiformis</i> )	<input checked="" type="checkbox"/> 0 Loose Smut ( <i>Ustilago tritici</i> )
<input checked="" type="checkbox"/> 3 Tan Spot ( <i>Pyrenophora tritici-repentis</i> )	<input checked="" type="checkbox"/> 0 Flag Smut ( <i>Urocystis agropyri</i> )
<input checked="" type="checkbox"/> 0 Halo Spot ( <i>Selenophoma donacis</i> )	<input checked="" type="checkbox"/> 0 Common Bunt ( <i>Tilletia tritici</i> or <i>T. laevis</i> )
<input checked="" type="checkbox"/> 0 <i>Septoria nodorum</i> (Glume Blotch)	<input checked="" type="checkbox"/> 0 Dwarf Bunt ( <i>Tilletia controversa</i> )
<input checked="" type="checkbox"/> 0 <i>Septoria avenae</i> (Speckled Leaf Disease)	<input checked="" type="checkbox"/> 0 Karnal Bunt ( <i>Tilletia indica</i> )
<input checked="" type="checkbox"/> 5 <i>Septoria tritici</i> (Speckled Leaf Blotch) Field races	<input checked="" type="checkbox"/> 6 Powdery Mildew ( <i>Erysiphe graminis</i> f. sp. <i>tritici</i> ) Field races
<input checked="" type="checkbox"/> 0 Scab ( <i>Fusarium</i> spp.)	<input checked="" type="checkbox"/> 0 Snow Molds
<input checked="" type="checkbox"/> 0 Black Point (Kernel Smudge)	<input checked="" type="checkbox"/> 0 Common Root Rot ( <i>Fusarium</i> , <i>Cochliobolus</i> and <i>Bipolaris</i> spp.)
<input checked="" type="checkbox"/> 0 Barley Yellow Dwarf Virus (BYDV)	<input checked="" type="checkbox"/> 0 Rhizoctonia Root Rot ( <i>Rhizoctonia solani</i> )
<input checked="" type="checkbox"/> 2 Soilborne Mosaic Virus (SBMV) Field races	<input checked="" type="checkbox"/> 0 Black Chaff ( <i>Xanthomonas campestris</i> pv. <i>translucens</i> )
<input checked="" type="checkbox"/> 0 Wheat Yellow (Spindle Streak) Mosaic Virus Field races	<input checked="" type="checkbox"/> 0 Bacterial Leaf Blight ( <i>Pseudomonas syringae</i> pv. <i>syringae</i> )
<input checked="" type="checkbox"/> 5 Wheat Streak Mosaic Virus (WSMV) Field races	<input type="checkbox"/> Other ( <i>specify</i> ) _____
<input checked="" type="checkbox"/> 5 Other ( <i>specify</i> ) Spindle streak mosaic virus (SSMV)	<input type="checkbox"/> Other ( <i>specify</i> ) _____
<input type="checkbox"/> Other ( <i>specify</i> ) _____	<input type="checkbox"/> Other ( <i>specify</i> ) _____
<input type="checkbox"/> Other ( <i>specify</i> ) _____	<input type="checkbox"/> Other ( <i>specify</i> ) _____

15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

<input checked="" type="checkbox"/> 1	Hessian Fly ( <i>Mayetiola destructor</i> )	<input checked="" type="checkbox"/> 1	Other (specify) Wheat Curl Mite
<input type="checkbox"/> 0	Stem Sawfly ( <i>Cephus</i> spp.)	<input type="checkbox"/>	Other (specify)
<input type="checkbox"/> 0	Cereal Leaf Beetle ( <i>Oulema melanopa</i> )	<input type="checkbox"/>	Other (specify)
<input checked="" type="checkbox"/> 1	Russian Aphid ( <i>Diuraphis noxia</i> )	<input type="checkbox"/>	Other (specify)
<input checked="" type="checkbox"/> 1	Greenbug ( <i>Schizaphis graminum</i> )	<input type="checkbox"/>	Other (specify)
<input type="checkbox"/> 0	Aphids		

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

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***Exhibit D.***  
***Additional Description of NuHills***

NuHills is a hard white winter wheat bred and developed by AgriPro Wheat. NuHills is semidwarf in plant height and has white chaff at maturity. It has medium maturity and excellent straw strength. NuHills is resistant to Stem Rust, Leaf Rust and Soil Borne Wheat Mosaic Virus. It is moderately resistant to Speckled leaf blotch, Wheat Spindle Streak Mosaic Virus and Wheat Streak Mosaic Virus. NuHills has an intermediate reaction to Tan spot and is moderately susceptible to Powdery Mildew. NuHills is susceptible to Hessian Fly and the wheat curl mite.

Juvenile growth habit is semierect. Plant color at boot stage is blue green. Auricle anthocyanin and auricle hairs are present. Flag leaf at boot stage is erect and twisted. Waxy bloom is present on the head, stem and flag leaf sheath. Anther color is yellow. Head shape is tapering and awned. Glumes are glabrous, medium in width and length with square shoulders and short acuminate beaks. Seed shape is ovate. Brush hairs are medium in size. Seed crease depth is shallow and width is narrow. Seed cheeks are rounded.

NuHills is adapted to the Great Plains states of Colorado, Nebraska, Kansas, Oklahoma and Texas.

# AGRI PRO WHEAT

9/16/2003

Year-Loc	Flour/Wheat Quality					Baking Quality									
	WhtP rot Prot	Flr Prot	Norris Hard Hard	Flr Yld%	Ash	Peak Time/min	PeakHT N.U.	Tol.mm	Abs.%	Mix Time/min	Loaf Vol/cc	Grain	Tex	Color	Comments
NuHills															
1998 - SK	12.3	11.1	89	70.2		3.00	5.5	912	63.0	3.00	925	3	3	2	
1999 - QK	12.9	11.1	71	70.0		3.75	5.5	774	62.0	3.75	805	4	2	1	
2000 - EB	11.2	9.7	83	69.1		4.50	4.8	1112	59.0	4.25	840	4	3	2	
2000 - VT	13.8	12.5	89	68.9	0.560	3.00	5.5	876	62.0	3.00	940	5	2	2	
2000 - WB	14.2	12.1	77	65.2	0.442	3.75	5.0	1228	61.0	4.00	1030	4	3	3	
2001 - DL	14.9	13.5	67	69.7	0.480	2.50	5.0	680	64.0	2.50	925	3	3	3	
2001 - DL	14.3	13.3	75	69.7	0.486	2.75	5.0	892	61.0	2.75	900	4	3	2	
2001 - EB	12.1	10.8	63	68.3	0.462	3.50	4.5	1087	62.0	3.75	890	3	3	3	
2001 - HM	12.8	11.5	77	69.6	0.488	3.00	5.0	935	61.5	3.00	920	4	3	3	
2001 - HP	12.9	11.5	73	68.1	0.474	2.75	5.3	861	61.0	2.75	925	4	3	3	
2001 - JP	13.6	12.4	73	68.2	0.386	3.50	5.0	1033	64.0	3.50	910	3	3	3	
2001 - PD	14.2	12.8	77	68.1	0.450	3.50	5.0	965	61.0	3.50	975	3	3	2	
2001 - PD	13.8	12.4	79	69.0	0.400	3.00	5.0	895	62.0	3.00	945	4	3	2	
2001 - VD	13.9	12.8	73	68.1	0.446	2.75	5.0	1068	61.0	2.75	1010	4	3	3	
2001 - VD	12.9	11.5	68	67.7	0.426	3.00	5.0	943	59.5	3.00	885	4	3	3	
2002 - CK	15.0	13.6	54	67.7	0.410	4.00	5.0	1133	68.0	3.75	1080	3	3	2	
2002 - DW	16.7	15.0	73	65.8	0.496	3.50	5.0	834	67.0	2.75	960	4	3	3	
2002 - IRW	13.5	12.5	60	68.1	0.405	3.00	5.0	804	64.0	3.00	995	4	3	3	
Average:	13.6	12.2	73	68.4	0.454	3.26	5.1	946	62.4	3.22	937	4	3	3	

Ratings: 1-2: Excellent 3-4: Very Good 5-6: Acceptable 7: Questionable 8-9: Unacceptable

**NuHills Yield, Test Weight, and Agronomic Data****AgriPro Yield Trials**

<u>Variety</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>Average</u>
NuHills	58	57	48	55
Trego	45	57	52	50
NuFrontie	0	51	52	51
Lakin	45	59	50	51
Jagger	54	56	50	54
Locations	9	7	4	20
	1-CO	1-CO	1-CO	
	2-NE	1-NE	1-NE	
	3- KS	2- KS	2- KS	
	1- OK	1- OK		
	2-TX	2-TX		

**2003 Kansas Performance Tests**

Locations	Irrigated 3		Northwest dry 3		Southwest Dry 3	
	Yield	TW	Yield	TW	Yield	TW
NuHills	87	59	68	60	45	60
trial mean	77	59	61	59	46	59

Locations	Northeast 2		Southeast 3		Northcentral 3		Southcentral 3	
	Yield	TW	Yield	TW	Yield	TW	Yield	TW
NuHills	75	60	63	59	106	61	50	58
trial mean	69	59	63	59	94	60	50	56

**AgriPro Variety Agronomic Ratings. 1 (excellent) to 9 (worst)**

Variety	Stem R	Leaf R	Stripe R	SBMV	SSMV	WSMV	S. Trit	Tan spot	PM	HF
NuHills	3	1	1	1	3	4	4	6	7	8
Jagalene	3	1	1	1	3	4	4	6	8	8
Jagger	5	8	1	1	4	4	3	4	7	4
2137	7	7	7	1	4	4	4	5	3	1
Trego	3	4	8	2	4	5	7	8	8	5
# of observations per trait 1999-2003	3	44	24	4	4	3	6	5	14	2

***Exhibit E.***  
***Statement of the Basis of Applicant's Ownership***

The variety for which Plant Variety Protection is hereby sought was developed by Dr. John Moffatt, an employee of AgriPro Wheat, a business unit of Advanta USA. By agreement between employees and AgriPro Wheat, all rights to any invention, discovery, or development made by the employee while employed by AgriPro Wheat, were assigned to AgriPro Wheat with no rights of any kind pertaining to 'NuHills' being retained by the employees.

By contractual agreement the variety 'NuHills' was purchased from AgriPro Wheat, a business unit of Advanta USA in June of 1996 and is currently owned by Monsanto Company.